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From: Enck, Judith
Sent: Fri 12/16/2016 2:11:59 PM
Subject: Fwd: News Clips (PFCs)

Sent from my iPhone

Begin forwarded message:

From: Region2 PAD News <Region2_PAD_News@epa.gov>
Date: December 16, 2016 at 8:42:24 AM EST
To: "R2 EPA Region 2 (EPA Staff)" <R2_EPA_Region_2_EPA_Staff@epa.gov>
Subject: News Clips (PFCs)

Burlington Courier Times

EPA responds to PFC investigation; other agencies mum

By Kyle Bagenstose and Jenny Wagner, staff writers

Dec. 16, 2016

The Environmental Protection Agency has issued a defense of its 70-part per trillion advised limit for PFOA and PFOS in drinking water, following several months of correspondence between the agency and this news organization.

On Nov. 7, The Intelligencer and Courier Times published a report investigating the scientific basis and safety of the EPA's advised limit for the chemicals, which have been found in varying amounts in the drinking water of at least 100,000 area residents. Referencing criticisms leveled by the Drinking Water Quality Institute, an advisory group to the New Jersey Department of Environmental Protection, we looked at whether:

- The EPA neglected to account for possible health effects -- such as liver toxicity, delayed development and decreased immune response -- that may occur at lower levels of exposure.
- The EPA underestimated the cancer risk of the PFOA.
- The EPA's health advisory adequately protects women who plan to become pregnant.
- The EPA came to illogical scientific conclusions while developing the 70-ppt advised limit.

Questions pertaining to the November reports were emailed to the EPA on Oct. 14 with a deadline of Oct. 27 for answers. On the afternoon of Friday, Nov. 4, EPA spokesman David Sternberg emailed several pages of highly technical responses, noting agency representatives would provide official answers in plain language at some point. Official answers to some questions were received Dec. 13.

Published here are analyses of the EPA's technical responses and official answers.

Continuing exposure

In October, this news organization questioned whether the EPA's 70-ppt advised limit is protective of people who were previously exposed to much higher levels of PFOA and PFOS, as is suspected to be the case in Bucks and Montgomery counties. In its November technical responses, the EPA wrote that once drinking water levels are brought below 70 ppt, it would expect the amount of the chemicals in the blood of those people would slowly drop to a level associated with exposure to 70 ppt or less, and that such a level would be safe.

In follow-up questions sent in November, we asked whether those people would be at risk of health effects until their blood levels dropped. Similarly, we questioned whether the amount of the chemicals still in their drinking water — which could range from zero to 69 ppt — would affect how long it would take for them to no longer be at risk.

If true, that would mean local residents in Bucks and Montgomery counties could reduce their risk of health effect by consuming as little PFOA and PFOS as possible in the future, including by avoiding drinking water the EPA has deemed to be safe.

In its official answer, the EPA repeated its previous response and failed to address whether local residents can more quickly eliminate health risks by limiting exposure to PFOA/PFOS in drinking water as much as possible.

"Based upon the best available peer-reviewed data, exposure to water at (70 ppt) is predicated to ... not result in adverse health effects," the agency wrote. "For people who may have pre-existing elevated concentration in their blood serum, that will slowly decrease once the exposure from their drinking water is decreased to 70 ppt or less."

Low-level health effects

The New Jersey Drinking Water Quality Institute and the EPA disagree on what health risks stem from exposure to PFOA at low levels. In a presentation for its proposed 14-ppt limit for PFOA, the New Jersey institute referenced a study that showed low levels of exposure resulted in a delay in mammary gland development in mice. The author of that study previously told us such delays in humans could potentially result in an increased cancer risk.

In its November technical responses, the EPA dismissed the findings, stating it didn't believe delayed mammary gland development results in any clear negative health effects. Instead, the EPA relied on a study that found delayed bone hardening and accelerated puberty in mice as the basis for its health advisory.

Responding to questions about the discrepancy, the EPA wrote that it didn't select the mammary gland study as the basis for its safe amount of exposure to PFOA and PFOS because the agency believed there was "ambiguity" in the study's methodology and a "lack of observed effects" that the mice had any problems nursing healthy offspring.

Exposure risk

In its technical responses, the EPA stated its 70-ppt advised limit for PFOA and PFOS in drinking water is protective of human health because it's based on a risk tool called a "Relative Source Contribution," which assumes only 20 percent of exposure to a chemical comes from drinking water, and 80 percent comes from other sources, such as air, food, dust and soil.

In other words, the EPA is comfortable with 70 ppt being just one-fifth of an average person's total exposure to PFOA and PFOS.

The agency cited a 2015 study in which researchers estimated that, in highly-exposed populations, drinking water accounts for approximately 10 percent of total exposure to PFOS rather than the 20 percent the EPA's health advisory is based on.

However, based on expert interviews and a review of blood testing results in other communities, this news organization questions the science behind EPA's statement. The 20/80 ratio is a standard tool employed by the EPA and other agencies -- not specific to PFOA and PFOS -- and the 2015 study only analyzed exposure scenarios among the general population in a number of countries.

It didn't analyze data from residents in highly-exposed communities such as Warminster, Horsham or Warrington. Studies of similar populations have shown blood levels of PFOA and PFOS are several times higher than average Americans, suggesting drinking water contamination played a large role in the amount of the chemicals in their blood.

We asked the EPA in November if it intends to conduct research specific to highly-exposed communities to determine whether or not the 20/80 ratio applies to populations such as those in Bucks and Montgomery counties.

The EPA responded that it didn't intend to study such populations "at this time," but that its health advisory is "based on the best available peer-reviewed studies of the health effects of PFOA and PFOS." The EPA also noted that if it were to increase the percentage of PFOA and PFOS exposure it assumes comes from drinking water, its 70-ppt advised limit would be higher, because other sources would account for a smaller percentage.

"Since drinking water is the source EPA can control, we 'over-control' exposure from drinking water in order to reduce overall exposure," the agency stated.

Water-to-blood ratio

New Jersey's Drinking Water Quality Institute stated, based on its review of scientific studies, that consumption of PFOA in drinking water will lead to at least a 100-fold increase in blood. In other words, consuming 1 ppt of PFOA in water eventually would lead to 100 ppt in blood. Such a relationship strongly supports the notion that drinking water can be a

primary route of exposure to PFOA and PFOS.

Responding to our question about whether the EPA believes such a relationship exists, the agency wrote: "While it would be useful if we could determine a direct numerical relationship between tap water concentrations of PFOA/PFOS in blood serum, the data does not support doing it because there are too many other variables that come into play."

Additional EPA responses

In its November technical answers, the EPA also made the following points:

- The agency didn't use research by Harvard researcher Philippe Grandjean, and subsequent calls for a 1-ppt PFOA drinking water limit, because of uncertainties in the work and because there wasn't a weight of evidence from other epidemiological studies that examined effects to the immune system. Changes in how children's immune systems responded to vaccines were also, for the most part, statistically insignificant, the EPA stated.
- The EPA assumed a very high rate of water consumption -- 3.7 liters a day for a 150-pound person -- in developing its health advisory, to protect even lactating women.
- The EPA correctly applied a mathematical slope when developing its drinking water advisory. The New Jersey institute charged that it had not.
- The 70-ppt advised limit is protective of women who plan to become pregnant. The New Jersey institute is critical of the EPA for not including such women in its list of "sensitive sub-populations" and doesn't believe the EPA level protects them.

Blood testing report

On Nov. 6, this news organization published a separate report examining statements made by representatives of the U.S. Agency for Toxic Substances and Disease Registry. Representatives of the agency, which is a division of the U.S. Centers for Disease Control and Prevention, previously said blood tests for local residents to determine serum levels of PFOA and PFOS wouldn't be valuable.

The following were among our findings:

- A basic blood testing program can provide baseline information on how much of the chemicals may have entered the blood of residents affected by drinking water contamination.
- A baseline also can be used, in conjunction with follow-up testing, to ensure exposures to the chemicals have ceased.
- Residents can share their blood level information with health care professionals to make informed decisions regarding screenings for possible health effects.
- Blood level information potentially can be useful in lawsuits regarding exposures.

Agency for Toxic Substances and Disease Registry

On Oct. 14, we sent the ATSDR 10 questions pertaining to the Nov. 6 report, including those paraphrased below. The deadline was Oct. 27, but despite multiple assurances that responses would be sent, none were received as of Dec. 15:

- Does the agency have any knowledge of Bucks or Montgomery County residents whose blood has been tested for PFOA and PFOS, and if so, what did the results show?
- Does the agency believe the EPA's 20/80 exposure ratio is accurate for Bucks and Montgomery residents?
- Is a 70-ppt advised limit adequate to protect local residents, as they are suspected to have been exposed to much higher amounts previously?
- Does the agency believe blood testing would be useful in future studies of potential health effects in Bucks and Montgomery county residents exposed to the chemicals?
- Does the agency believe knowledge of blood levels would be useful to local mothers in deciding whether or not to breast-feed? Researchers have told this news organization that PFOA and PFOS can be passed on in great amounts from mother to child through breast-feeding.

The Pennsylvania Department of Health

On Oct. 14, we also sent five questions to the Pennsylvania Department of Health. Several were similar to questions sent to the ATSDR, particularly regarding the value of blood testing. We also asked whether the department is still coordinating with the ATSDR on possible future health studies, and whether the department is actively seeking public or private funding sources to fund an estimated minimum cost of \$7 million to conduct blood testing locally. The estimate, from the office of Gov. Tom Wolf, was included in a press release that also stated Pennsylvania couldn't afford to pay for the testing. Responses to these questions, despite several assurances, were not received as of Dec. 15.

Photo by Environmental Health Perspectives journal A pair of lab rats used during research into the health effects of PFOA on offspring. The 2011 study found delays in mammary gland development from any level of exposure, and was key in the NJDEP's Drinking Water Quality Institute's decision to recommend a 14-ppt limit for the chemical. CREDIT: Environmental Health Perspectives journal.

Art Gentile/Photojournalist(File photo) Karen Johnson, of the Environmental Protection Agency, was part of the panel that discussed the health issues surrounding the contaminated water in wells in the communities of Horsham, Warrington and Warminster at a forum at Hatboro-Horsham High School on Monday, Aug. 29, 2016. Johnson told residents there that the EPA's 70 ppt advised limit for PFOA and PFOS was safe for all individuals.

Art Gentile/Photojournalist(File photo) Dr. Karl Markiewicz, from the Centers for Disease Control and Prevention was part of the panel that discussed health issues surrounding the contaminated water in wells in Horsham, Warrington and Warminster at a forum at Hatboro-

Horsham High School in August 2016. He told the audience that blood tests wouldn't be very informative.

Kim Weimer/photojournalist (File photo) Bob Frugoli, of Upper Southampton, and Ryan Guinter, of Warminster, secure a banner along County Line Road in Upper Moreland in August, during a rally to protest a recent decision by the military and the federal government not to pay for blood tests for Warminster, Horsham and Warrington residents following the 2014 discovery of chemicals in their drinking water.

Vermont Public Radio

Vermont Sets A Permanent Drinking Water Standard For PFOA

By HOWARD WEISS-TISMAN

15 HOURS AGO

VPR News

Vermont's safe water drinking standard for PFOA was set at 20 parts per trillion as an emergency rule until Thursday, when a legislative committee adopted it on a permanent basis.

HOWARD WEISS-TISMAN / VPR FILE

A legislative committee has permanently set Vermont's safe drinking water standard for the chemicals PFOA and PFOS at 20 parts per trillion.

Vermont's limit is far below the EPA's limit of 70 parts per trillion, and it is now one of the lowest drinking water standards in the country.

PFOA is a dangerous chemical that's been linked to thyroid disease, cancer, high cholesterol and endocrine issues, and it's been detected in drinking water in Bennington County.

It was used to make Teflon and other water-resistant materials.

When PFOA was found in the water in southwestern Vermont in February, very few people in the state had even heard of the chemical.

The state, at the time, set its safe drinking water standard at 20 parts per trillion under an emergency rule.

On Thursday, after months of hearings and a public comment period, the Legislative Committee on Administrative Rules permanently set the safety standard at 20 parts per trillion.

"I think this gives the people in Bennington County who are dealing with concerns related to PFOA a level of comfort," said Department of Environmental Conservation Commissioner Alyssa Schuren. "The rule is now set in stone, and there isn't a question about it any longer."

The contamination in Bennington has been linked to the former Chemfab plant, which was owned by Saint-Gobain before it moved in 2001.

In April, Saint-Gobain brought three law suits against the state challenging its low drinking water standard.

"While Vermont can set a PFOA limit, it is important that the State appropriately evaluates and properly applies the factors that go into setting any such regulatory standard," Saint Gobain spokeswoman Dina Silver Pokedoff said in a prepared statement. "That is why Saint-Gobain Performance Plastics filed in September an appeal of Vermont's emergency rule issued in August that sets the limit for PFOA at 20 ppt."

Two of the lawsuits have already been dismissed.

The other suit challenges the emergency rule and DEC attorney Matt Chapman says the state will look to dismiss those suits now that the standard has been adopted.

He said Saint-Gobain can now challenge the permanent rule if they choose to.

Mid-Hudson News

Monday, December 12, 2016

Newburgh councilman says city should reimburse residents for tainted water

NEWBURGH – Residents in the City of Newburgh found out last May they were drinking potentially tainted water from the Washington Lake reservoir. Since then, the city has been obtaining its water from the New York City Catskill Aqueduct.

It is unknown how long the chemical PFOS, the source of the contamination, has been entering Washington Lake, but Councilman Torrance Harvey said residents have been paying their water bills nevertheless.

"We as a legislative body need to start thinking and designing to pay some sort of rebate to the people who pay for this bad water in two or three years," Harvey said.

Members of the city administration note that the contamination is believed to have come from the Air National Guard Base at nearby Stewart Airport and before the contamination was discovered, the city did not know anything about it.

Coakley group rejects Greenland's water request

Posted Dec 15, 2016

By Jeff McMenemy

seacoastonline.com

GREENLAND - The Coakley Landfill Group has rejected the town of Greenland's request to provide municipal drinking water to homes near the Superfund landfill site.

Town officials sought municipal drinking water for these homes because they believe the homes are being threatened by a plume of contaminants.

The letter written by Peter Britz, the city of Portsmouth's environmental planner, states no contaminants have been detected in private wells above the Environmental Protection Agency's advisory level, nor is there proof that PFCs are actually coming from the landfill.

Britz goes on to say in the letter to Greenland Selectmen Chairman Vaughan Morgan that "in short there is no evidence that the site poses any risk to the public health or environment."

State Department of Environmental Services officials have been testing wells around the landfill to try to map the plume of contaminants, which includes PFCs, which have been found above the EPA's advisory level in monitoring wells and in residential wells below the level, and 1,4-dioxane, which the EPA said is a likely carcinogen.

Britz said the request doesn't meet the conditions needed for the group to agree to provide municipal water to homes around the landfill that are now on wells.

The Coakley Landfill Group includes Portsmouth, North Hampton, Newington, New Castle and several private companies, mostly trash haulers, Portsmouth City Attorney Robert Sullivan said recently. The towns and the U.S. Air Force used the landfill in North Hampton and Greenland from 1972 to 1982. The landfill then received incinerator residue from the Portsmouth refuse-to-energy facility at the former Pease Air Force Base until 1985.

Britz also contends that "it is not obvious that detections of contaminants at locations away from the Coakley site result from migration of those contaminants from the Coakley site."

Britz also pointed to a decision by the Coakley Landfill Group in July to reimburse Chinburg Development as much as \$200,000 for the company to construct a municipal water line to a planned development near the landfill.

Portsmouth City Attorney Robert Sullivan acknowledged recently the group did so even though there is no evidence residential wells there would be contaminated.

"He came to us with a proposal," Sullivan said about why the group agreed to the deal.

Britz in the letter said that decision "was not made due to concerns about contamination in the area."

"Indeed based on water quality testing performed by the subdivision applicant and a preliminary hydrogeologic evaluation by the CLG, there was every expectation that drinking water wells could be installed in the subdivision that would provide safe potable water to future residents," Britz said.

"Instead the decision was made because EPA and DES were concerned that installation of significant new private wells directly adjacent to the site might alter the groundwater flow pattern in the area and the agencies wanted to prevent that from happening."

Portsmouth City Manager John Bohenko said at the time the deal was announced that "one motivating factor in the negotiation and execution of the agreement is concern on the part of the Environmental Protection Agency (EPA) that drawing groundwater from private wells at the ten (10) lot subdivision might affect the remediation of the nearby Coakley landfill site."

Gov. Maggie Hassan formed a Seacoast pediatric cancer cluster task force earlier this year after state officials detected a small cluster of rhabdomyosarcoma, which caused the deaths of several area children. The state also identified "a small excess of pediatric lung cancer cases" of a single rare type called pleuropulmonary blastoma. Several area parents believe the cancers could have been triggered by environmental factors. The task force's work led to concerns about contamination from Coakley.

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